

**SYNTHESIS REPORT ON CROSS-CUTTING
CAPACITY CONSTRAINTS, NEEDS & PRIORITIES
FOR THE IMPLEMENTATION OF RIO CONVENTIONS
ON CLIMATE CHANGE, DESERTIFICATION, BIODIVERSITY**

NCSA GEORGIA

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December, 2004

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1. Introduction

Three Rio Conventions to which Georgia is a party - UN Framework Convention on Climate Change (UNFCCC), UN Convention on Biological Diversity (UNCBD) and UN Convention to Combat Desertification (UNCCD) oblige each participating country to undertake special activities to mitigate the loss of biodiversity, effects of climate change, and desertification. In order to ensure that the participating countries have sufficient capacities to comply with the respective obligations of the Conventions, GEF supported National Capacity Self-Assessment (NCSA) exercise which provides countries with the opportunity to take the lead in articulating their own capacity needs and priorities with respect to the global environmental management.

In response to this initiative, Ministry of Environment Protection of Georgia in cooperation with UNDP has commissioned the study on national capacity constraints, needs and priorities for capacity development so that the country can better address binding requirements of the Rio Conventions. The first phase of the NCSA project included the preparation of thematic profiles in climate change, biodiversity and desertification/land degradation areas. Each thematic profile identified capacity constraints within the respective area. In addition, separate studies were commissioned to assess monitoring capacities of the country, political-economic environment and incentive mechanisms for the implementation of three Rio Conventions.

The second phase of the project included the identification of priorities for each thematic area. For this purpose three prioritization workshops were held resulting in a selection of a set number of priority issues that require capacity building. Due to the very narrow segregation of issues as many as *six* top-ranking issues were considered as priorities under each thematic area. (The results of prioritization are presented in Appendix 1.)

The current stage of NCSA project builds upon the previous work done and *aims*

- To provide in-depth analysis for the prioritized issues mentioned above and
- To identify cross-cutting capacity constraints, needs, and opportunities for synergies for capacity development.

The word “Capacity” used in this report is comprised of three different components. Each of these component parts can be defined as the following:

Systemic Capacity: refers to organizational concerns in creating “enabling environments”. This includes policies and plans, economic, regulatory and accountability frameworks within which institutions and individuals operate, the relationships that exist, both formally and informally, between institutions and the distribution of institutional responsibilities.

Organizational Capacity: refers to institutional levels, focusing on the overall performance and functional capabilities of an organization, access to finances, information, technology, infrastructure and other resources, availability of skilled human resources, its organizational structure and its ability to adapt to change.

Individual Capacity: refers to specific attributes enabling individuals to perform functions, make decisions and ensure these are implemented in an effective, efficient and sustainable manner.

Preparation of the current report included the following steps:

- ⇒ The first step involved the review of thematic profiles, identification of capacity constraints for the prioritized issues and arranging these constraints along the three levels – systemic, institutional and individual levels of capacity constraints. This stage of the analysis resulted in the production of 18 matrices (six for each thematic area) which are given in Appendix 2.

It should be mentioned here that the constraints identified from the thematic profiles were further confirmed by various stakeholders. Under land degradation thematic area these constraints were

confirmed at the root cause analysis workshop; as to the other two areas, consultation meetings were held with the members of the Advisory Committees established under the biodiversity and climate change thematic areas.

- ⇒ During the second stage, priority issues were grouped into a broader category of issues based on the closeness among the issues themselves and based on the similarities among the capacity constraints that was identified during the previous step. These categories of issues, that are also the cross-cutting requirements of conventions, are the following:
 - Awareness raising of decision makers concerning relevant environmental issues
 - Data collection, analysis and dissemination to inform the decision making process
 - Development of relevant plans, programmes and specific measures
 - Implementation of relevant plans, programs and specific measures
 - Strengthening research capacities
 - Technology transfer

- ⇒ During the third stage an in-depth analysis was undertaken for the six categories of cross-cutting priority issues. This process in turn included the following steps:
 - Identification of a problem(s)
 - Identification of the significance of problem(s)
 - Constructing problem trees. (Problem tree is a diagram linking all the root causes, causes and problems. Problem trees first list immediate causes for the existence of the problem under consideration; then they go further to answer question why each of the capacity constraint exists – thus going down to underlying, root causes.)
 - Explaining the causal relationships for the identified problems that were evident from problems trees.

- ⇒ Finally, identification was made of those cross-cutting capacity constraints that exist across various issues and require synergistic approach for their solving.

Next sections of the report present the findings of the above described analysis for the six categories of issues. The analyses of each category of issues start with the identification of relevant requirements of conventions against which existing capacity constraints are analyzed. The following sub-sections report the results of prioritization exercise; state importance of the issues; explore causal relationships for the existence of identified problems; list needed capacities at three levels; and finally identify opportunities for synergies across three thematic areas. The last chapter of the report presents the summary of capacity constraints that exist across at least two categories of issues.

2. Cross-Cutting Requirements

2.1. Awareness raising of decision makers

2.1.1. Requirements of conventions

All three conventions have education and public awareness provisions relating to the relevant environmental issues. Although these conventions do not separate awareness raising of the decision makers as such (with the exception of UNCCD Article 19.1.j), it is implied that the decision makers, especially those at sub-national levels, should be the targets for awareness raising efforts as well.

UNFCCC Article 4.1.i. Promote and cooperate in education, training and public awareness related to climate change.
Article 6.1.a. Promote and facilitate ... the development and implementation of educational and public awareness programs on climate change and its effects.

UNCCD Article 19.2. Promote understanding of the causes and effects of desertification and drought.
Article 19.3.g. To that end to train scientific, technical and management personnel.

Article 19.1.j...Training of decision makers, managers, and personnel who are responsible for the collection and analysis of data for the dissemination and use of early warning information on drought conditions.

UNCBD Article 13. Promote and encourage understanding of the importance of, and the measures required for, the conservation of biological diversity.

2.1.2. National priorities

Issues prioritization scorecard, given to the participants of three workshops under each thematic area, contained two separate issues regarding awareness - awareness raising of general population and awareness raising of the decision makers. The latter issue was considered as a top priority under all areas, while the former one scored lowest (see Appendix 1 for more details).

2.1.3. Importance of the issue

This issue is considered as a priority because low level of awareness and knowledge of decision-makers about specific issues in climate change, land degradation and biodiversity conservation areas limit their ability for discussion, decision-making and action.

2.1.4. Analysis of the causes of failure to meet the requirement

It is generally agreed that the awareness and understanding of environmental problems among the decision makers working in various sectors (energy, agriculture, transportation, etc.), especially of those at the local level, is low. Namely, there is poor understanding of the benefits of biodiversity protection, undertaking preventive measures for land degradation and understanding of other practical measures that can be used to successfully implement the conventions.

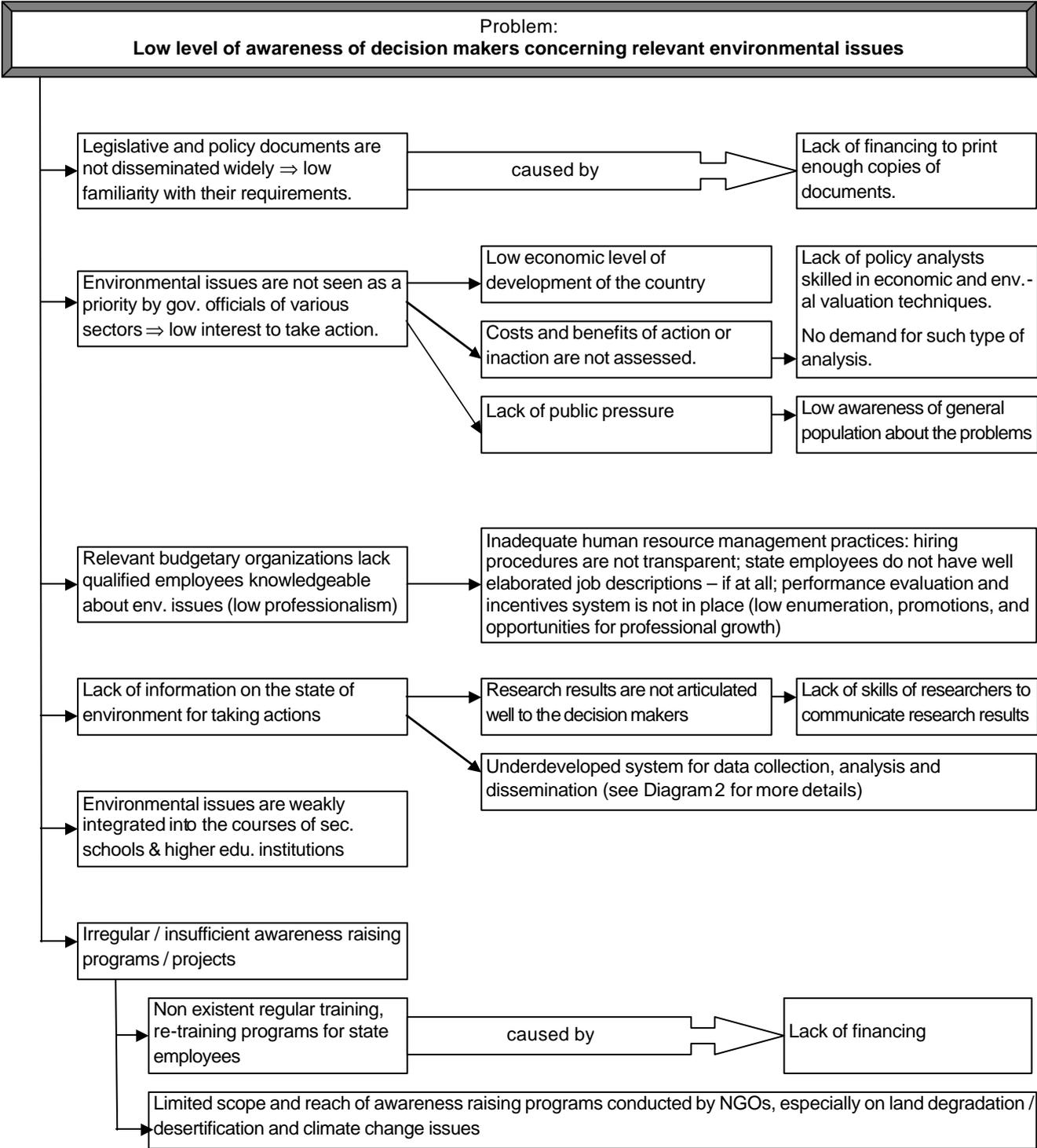
In-depth analysis of the low awareness of decision makers identified six immediate causes for this problem. The first cause is connected with insufficient familiarity of decision-makers with legislative provisions and convention requirements concerning relevant environmental issues. This in turn is caused by lack of funds to print and distribute enough copies of the documents.

The second immediate cause relates to the fact that environmental issues are not seen as a priority by governmental officials; hence there is low interest to take actions. This, on the one hand, is caused by the low level of development of the country - politicians are mainly preoccupied with economic development and growth; On the other hand, politicians are not aware of the costs of action or inaction pertaining to solving specific environmental problems. The root causes of the latter capacity constraint lie in the fact that firstly, there is no demand for undertaking policy analysis of a specific action or inaction, and secondly, there is a lack of policy analysts capable of translating such actions into economic and financial costs, both actual and opportunity costs. And finally, one of the underlying causes of the problem is the lack of public pressure, in turn caused by the low awareness of general population about relevant environmental problems (land degradation, loss of biodiversity, climate change).

The third reason for low awareness of decision makers (especially at sub-national levels) about environmental issues is connected with the professionalism of the decision makers themselves. It was noted

in the thematic profiles that qualifications of the decision makers do not always match with the requirements for various posts; although in most cases, written requirements do not even exist. The underlying cause for this is the poor human resource management practices of institutions that are demonstrated by the non-transparent hiring procedures, non-existence of job descriptions, performance evaluations, and by the non-existence of incentives system for employees (low enumeration, promotions, and opportunities for professional growth).

Diagram 1. Problem tree for the Priority Requirement
(Each arrow points to the causes of capacity constraints)



The fourth immediate cause pertains to the lack of information about the state of environment. One of the underlying causes concerns with underdeveloped system for data collection, analysis and dissemination which will be discussed later in the report. Another underlying cause includes poor articulation of research

results caused by the low skills of researchers to communicate, present study results in an easily understandable form for the decision makers.

The fifth immediate cause of poor awareness stems from the fact that environmental issues are poorly integrated into the courses of secondary schools and higher education institutions. Finally but not the least, one of the major causes of low awareness is irregular and insufficient awareness raising programs and projects. One of the underlying causes is the lack of state financing for regular training and re-training programs of state employees; another underlying cause is that the scope and reach of existing awareness raising projects conducted by NGOs is limited; besides they are conducted irregularly.

2.1.5. Needed capacities

Based on the above root causes analysis the following needs for the capacity building were identified:

Capacity needs at system level

- Integrate environmental considerations into the school curricula and cooperate with other countries in order to avoid “re-inventing the wheel”.
- Mobilize human and financial resources for undertaking awareness raising programmes.

Capacity needs at institutional level

- Provide assistance in: a) developing job requirements and detailed job descriptions for employees, at least for those holding key positions; b) establishing performance evaluation system.
- Establish a system for the provision with information, including information about legislative documents, to the decision-makers. One of the possibilities is to have intranet at all state institutions and provide trainings on its use. More active provision with information might include organizing regular roundtables around environmental issues and assuring the participation of all relevant key decision-makers.
- Institutionalize the provision of regular training and re-training programs for state employees.
- Strengthen capacity of NGOs to reach more segments of the country’ population with awareness raising programmes.
- Strengthen capacity of media in addressing environmental issues.

Capacity needs at individual level

- Ensure the existence of political commitment to environmental and sustainable development issues
- Ensure the delivery of critical information to policy makers
- Increase the knowledge and understanding of decision makers about the commitments made by the country as a signatory of the conventions, and the implications on national development policies and programs.
- Continuous awareness raising of environmental and sustainable development issues among political representatives, decision makers and general public.
- Increase the skills of policy analysts on economic and environmental valuation techniques, and on conducting comprehensive policy analysis for environmental issues.
- Increase communication and presentation skills of researchers.

2.1.6. Opportunities for synergies

Approaches to increasing the awareness of decision makers and the general public at large, are similar for all three conventions. For example, incorporation of relevant environmental issues into school curricula is a need for all three conventions and therefore one of the opportunities for synergy is to create combined multidisciplinary curriculum. Another opportunity is to conduct combined awareness raising projects for all three thematic areas.

2.2. Data Collection & Information Management

2.2.1. Requirements of conventions

All three Rio conventions share a commitment to gather, assess, and make available information to diagnose environmental problems and to provide adequate support for planning. The specifics include developing national inventories, sharing results of technical, scientific and socio-economic research, training and institutional development.

UNFCCC Article 5. Support and further develop ... data collection and systematic observation, taking into account the need to minimize duplication of effort.

UNCCD Article 16. To integrate and coordinate the collection, analysis and exchange of relevant short term and long term data and information to ensure systematic observation of land degradation in affected areas and to understand better and assess the processes and effects of drought and desertification.

UNCBD Article 7. Monitor, through sampling and other techniques, the components of biological diversity important for its conservation and sustainable use paying particular attention to those requiring urgent conservation measures and those which offer the greatest potential for sustainable use. .. Maintain and organize, by any mechanism data, derived from identification and monitoring activities.

2.2.2. National priorities

This requirement received the lowest scores under all three thematic areas (see Appendix 1). However, the issue of data collection is still explored here in more detail because, as the in-depth analysis of other issues will show later, it is the main barrier for meeting the requirements of other national priorities and requirements of the conventions. For example, the development of plans, strategies and programs, that scored high among other issues, requires by itself good information base. Implementation of preventive measures against land degradation – the highest ranking issue under desertification thematic area- also requires availability of data about soil characteristics. This is why, after re-considering the results of prioritization exercise it was agreed among workshop participants that the area of data collection and analysis requires special attention in terms of capacity building.

2.2.3. Importance of the issue

Existence of a well functioning system for data collection and analysis is important for several reasons: First, as it was mentioned above, armed with information public can be mobilized around solving particular issues; public can also pressure government to adhere to its obligations. Second, sound information systems make the fulfillment of the reporting obligations to different conventions easier. Third, data is required for predicting and anticipating critical events related to all three conventions. And finally, data is required for the development of specific policies, strategies, plans, undertaking specific measures. For example, lack of information on soil types and structures prevents government to formulate land use and management strategies responsive to such concerns as soil erosion. Currently, due to the many problems existing in information collection and management systems, the country's government has limited capacity to meet its obligations, which results in uninformed constituency, poor knowledge of existing problems and their extent by the decision makers which in turn results in poor planning practices (priorities for action are not identified).

2.2.4. Analysis of the causes of failure to meet the requirement

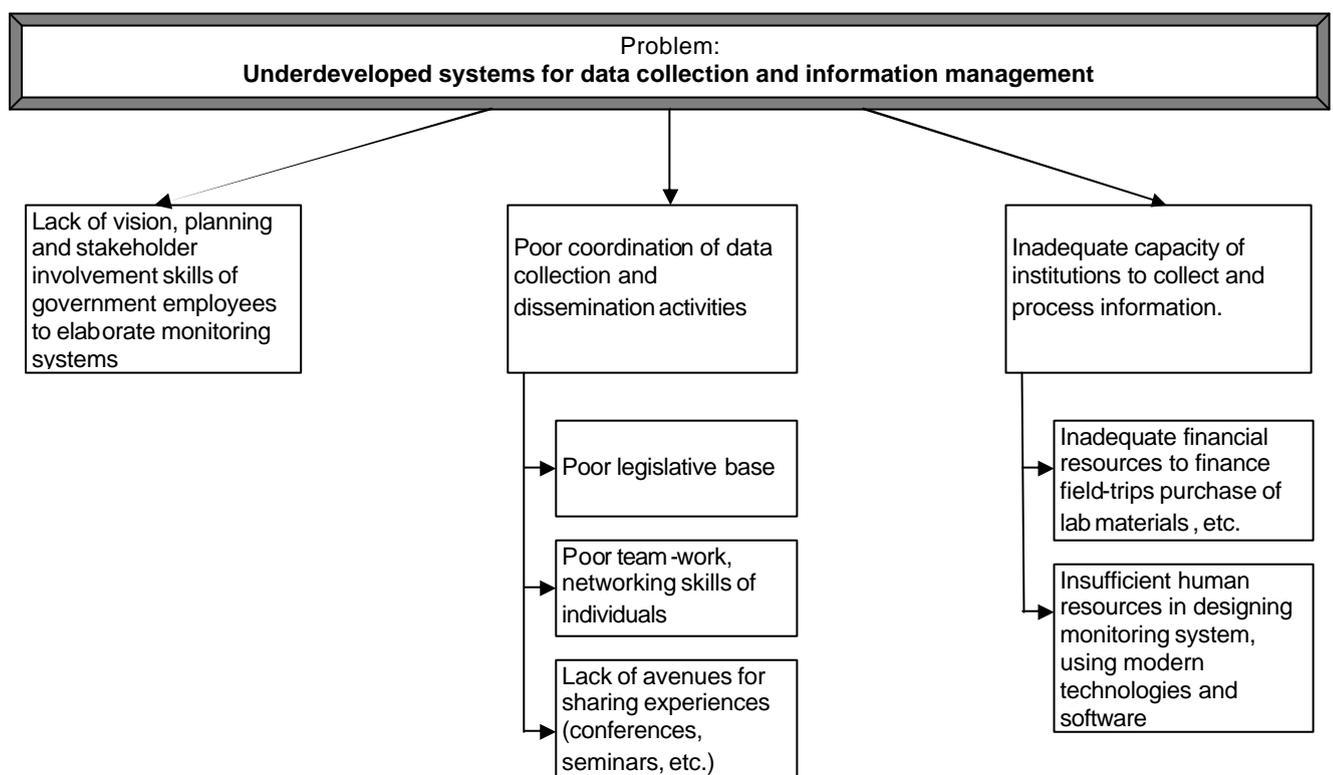
Within the scope of NCSA project institutional survey was held to identify data sources and the practice of information management within and among various institutions. The study noted that information delivery systems tend to be weak which hinders effective policy making and management. Root cause analysis of this problem - schematically presented on Diagram 2, is based on the findings of the mentioned survey, as well as on the thematic profiles prepared for the three areas.

As can be seen from the diagram below there are three major immediate causes for the problem of underdeveloped system for data collection and information management. One of the first causes relates to the lack of vision for the development of functioning monitoring systems. Government employees responsible for establishing such system lack planning and stakeholder involvement skills in the process of identifying data requirements, harmonizing methodologies and properly delegating responsibilities to various institutions.

The second immediate cause concerns the poor capacity to coordinate data collection activities. While various institutions may operate monitoring systems, they are tailored to their own specific needs and are not consistent, harmonized, effectively shared with, or integrated into broader systems. Institutions decide themselves without any coordination with other agencies what information to collect, which is why duplication of activities frequently takes place.

Low level of coordination has several underlying causes. Very important among them is the issue of underdeveloped legislation that does not have relevant provisions about environmental monitoring – which organizations are responsible for undertaking monitoring activities and what should be their responsibilities, including the responsibility for sharing information. Other underlying causes contributing to the low capacity of coordination include a) poor team-work and networking skills of employees working for budgetary organizations and b) lack of avenues for sharing information, experiences and lessons learnt (e.g. roundtables, conferences, seminars, etc.)

Diagram 2. Problem tree for the Cross-Cutting Requirement
(Each arrow points to the causes of capacity constraints)



The final, but not the least immediate cause, is the inability of institutions to collect and process information. Moreover, there is a problem to ensure the quality of data as the system for certification of measurement devices is not in place any more. Underlying causes for underdeveloped system for data collection and analysis include:

- Insufficient mobilization and allocation of funds to
 - maintain observation networks
 - upgrade material-technical base; equipment in most institutions is outdated and non-functioning, and does not meet ISO requirements.
 - procure computers and relevant software for data processing
 - finance fieldwork for data collection (pay per-diems to employees, transportation expenses, etc.)
 - purchase necessary materials for laboratory analysis
- Inadequate human resources; there is shortage of specialists with the knowledge and skills in
 - designing monitoring systems and indicators, and providing on-line access to databases
 - data processing and information management, including skills in making consolidated, computerized databases
 - reporting and communicating information and research results

- using modern technologies, including computers
- geo-information systems

2.2.5. Needed capacities

Capacity needs at system level

- ➔ Develop legislative base for proper functioning of monitoring institutions (including identification of relevant institutions and assigning specific functions), in order to avoid duplication and ensure exchange of information, as well as rules for access to this information.
- ➔ Develop coordinated and compatible systems for data gathering, validation, analysis and dissemination.
- ➔ Develop mechanisms for data exchange.
- ➔ Develop indicators, giving higher priority to those cutting across at least two conventions.
- ➔ Identify institutions for gathering information data providers (mobilize information capacity of the country)

Capacity needs at institutional level

- ➔ Develop capacity to finance monitoring systems and increase financing through the Government budget
- ➔ Develop capacity to provide online access to data.
- ➔ Strengthen logistic support to monitoring systems; support infrastructure to operate monitoring systems.

Capacity needs at individual level

- ➔ To train institutional staff in preparation of inventories and national communications.
- ➔ Develop capacity of individuals in
 - the design of monitoring system
 - data processing and information management.
 - data organization

2.2.6. Opportunities for synergies

Due to the limited financial resources to conduct observations and collect information it is of utmost importance for Georgia to identify opportunities for synergies, especially when Rio conventions have overlapping information needs. "Synergies in National Implementation" document prepared by UNDP cross-compared information needs of various conventions and showed that there are several data sets of common interest, at least at the national level. Themes such as forestry and vegetation cover, land use and soil are particularly relevant to each instrument. This calls for building a core dataset common to each convention's needs as a synergistic action. The core dataset must include the below data at a minimum.

Data requirements that cut across all three conventions:

- | | |
|--|---|
| - Land use (by type) | - Livestock census |
| - Soils (by type) | - Climate (temperature, precipitation, etc.) |
| - Agriculture (by type) | - Population (count and density) |
| - Vegetation (by type) | - Roads |
| - Deforestation, afforestation (by type, area) | - Other infrastructure (transmission lines,...) |

Data requirements that cut across at least two Conventions

- | | |
|--|---|
| - Forests (by type, condition, density) | - Wetlands |
| - Forests regeneration type and rate | - Human settlements |
| - Forest production and export information | - Power transmission lines |
| - Forest tenure / land tenure | - Industrial activities |
| - Topography (elevation, slope, aspect) | - Power generation facilities (by type, capacity) |
| - Surface hydrology (lakes, rivers, streams) | |

The same UNDP document mentioned above gives an example of how synergistic action can be achieved. For example, data on biodiversity values (such as wildlife habitat) could be included in the data collection forms by the Forestry Department and addressed in database design in such a manner that those agencies interested in biodiversity could access a common data source, rather than collecting similar data as part of a separate process. Another suggestion is to establish a clearing house mechanism using Internet technology to share data.

2.3. Development of action plans, programs and strategies

2.3.1. Requirements of conventions

Achievement of the objectives of Rio conventions requires favorable policy framework that includes the development of comprehensive long-term strategies, programs and action plans relevant to biodiversity, climate change and land degradation, as well as integration of respective concerns into policies of other sectors having affect on natural resources. All three conventions cover these issues with a various level of detail. The most comprehensive guidance for developing the policy framework has the Convention to Combat Desertification, where the entire section of Part III is dedicated to action programmes. In addition, UNCCD and UNFCCC encourage countries to cooperate in the development of sub-regional and regional action programmes. Development of action plans and their integration with the plans of other sectors is considered interrelated, which is why these issues are explored here together.

UNFCCC Article 4.1.b. *Formulate*, implement, publish and regularly update national and, where appropriate regional programs containing measures to mitigate climate change ... and measures to facilitate adequate adaptation to climate change. Article 3. ...Policies and measures should be integrated with national development programs. Annex V, Article 3. National action programmes shall be an integral part of the policy framework for sustainable development.

UNCCD Article 5.e. Provide an enabling environment by ... establishing long-term policies and action programmes. Part III, Section 1 – Entire section deals with the development of action programs for addressing land degradation.

UNCBD Article 6. Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes; Integrate, as far as possible and as appropriate, the conservation and sustainable use of biodiversity into relevant sectoral or cross-sectoral plans, programmes and policies.

2.3.2. National priorities

The issue of preparing plans, programmes and various measures was considered as a priority under all three thematic areas, and therefore, represents a national priority for capacity building. The ranking along the three different thematic areas of this issue is as follows:

Issue	Ranking
UNCBD - Development of biodiversity conservation action plans and programs	No 2
UNFCCC - development and implementation of national climate change strategies and action plans	No 4
UNFCCC - development of abatement and adaptation programmes	No 5
UNCCD - adopting of an integrated approach for addressing land degradation	No 5

As can be seen under biodiversity thematic area, formulating action plans was considered as second priority issue; under climate change area it was placed among the top four priority issues; as to the land degradation area “*adopting of an integrated approach for addressing land degradation*” – which is an integral part of the planning process, occupied the fifth place among other issues.

2.3.3. Importance of the issue

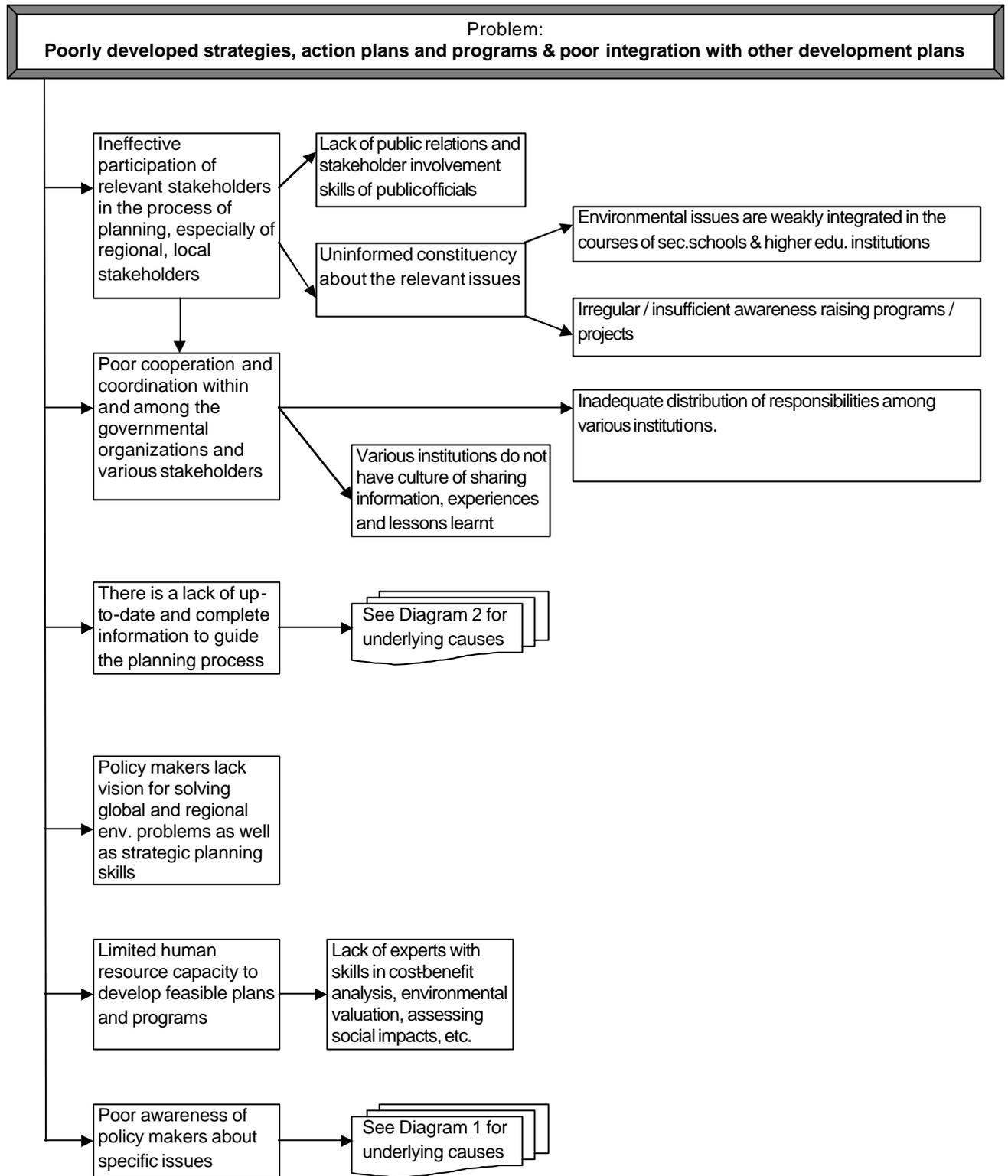
Currently country’s capacity to prepare comprehensive and feasible plans with the participation of all relevant stakeholders is limited. This in turn results in conflicting sectoral policies, non-fulfillment of planned measures or non-incorporation of most pressing needs into the planning process.

2.3.4. Analysis of the causes of failure to meet the requirement

Root cause analysis of the problem schematically shown on Diagram 3 revealed six immediate causes for the poor planning practices existing in all three thematic areas – biodiversity, climate change and land degradation / desertification. These causes are:

1. Ineffective participation of relevant stakeholders (especially of regional representatives) in the planning process, in turn caused by a) lack of public relations and stakeholder involvement skills of public officials and b) poor public awareness about the issues under consideration that limits their capacity to effectively participate in the planning process.

Diagram 1. Problem Tree for the Priority Requirement
 (Each arrow points to the causes of capacity constraints)



2. Poor cooperation and coordination within and among the governmental organizations and various stakeholders, including the stakeholders in neighboring countries (cooperation in this regard has started recently on various issues, such as transboundary river basin planning). Underlying causes for this capacity constraint are a) lack of culture of information sharing; b) inadequate distribution of responsibilities among various institutions - either there is no lead institution for coordinating the development of plans and programs or sometimes there are too many with overlapping responsibilities and competing mandates. Two structures in the climate change area – State Commission for Climate

Change Program and Scientific Advisory Council – can serve as examples for the latter capacity constraint.

3. One of the limiting factors for planning is the lack of information about the state of environment – there is a lack of up-to-date, complete and reliable information about existing problems and their extent. Underlying causes for this capacity constraint are addressed in Chapter 2.2.
4. Policy makers lack vision and strategic planning skills for developing plans and programmes. (Contributing factor to this issue is the lack of political commitment to environmental and sustainable development issues.)
5. Separate issue is a low awareness of policy makers about specific environmental problems, which makes the integration process even more difficult.
6. And finally, there are limited institutional and human capacities to develop feasible plans and programs. Individuals lack skills to set priorities, conduct policy analysis, evaluate alternative options. These capacities diminish at the local level.

2.3.5. Needed capacities

Capacity needs at system level

- Develop a culture of information sharing and communication.
- Develop a culture of engaging all affected and interested stakeholders into the planning process, especially of local representatives.
- Strengthen capacities of local governmental bodies in formulating local action plans and programmes.
- Strengthen the existing mechanisms and elaborate new ones for the cooperation with neighboring countries for solving environmental issues.
- Develop mechanisms for the coordination of planning activities (e.g. delegation of responsibilities).
- Linking social and economic priorities with environmental objectives.
- Strengthen capacity to raise awareness of the public (to encourage the interest of politicians)
- Strengthen capacities or create new where necessary to prepare technical, financial and economic analyses to be used in the planning process.

Capacity needs at institutional level

- Charge certain agencies in respective fields with coordinating functions for the process of preparation of various plans and programs.
- Develop human and mobilize financial resources to carry out necessary technical, financial and economic analyses for preparing policies and action plans.
- Public sector staffing of social science specialists and skilled managers. Currently an unbalance in favor of technical professionals is often apparent.

Capacity needs at individual level

- Enhance capacity of policy makers in strategic planning, setting priorities.
- Raise awareness of politicians (of various sectors) about environmental issues.
- Build capacity of policy analysts in evaluating alternative options and their consequences on sustainable development.

2.3.6. Opportunities for synergies

Capacity development interventions can be strengthened if they were directed to the areas where environmental priorities can be linked to other national priorities. At present, the existing practice shows that priorities in each of the thematic areas under review do not properly consider the priorities in other sectors and vice-versa and sometimes represent rather ambitious wish lists of actions compared to the economic possibilities of the country. Linking priorities can have multiplier affect. For example, as the UNDP report “Synergies in National Implementation” notes, the lack of energy supply creates scope for a targeted approach to renewable energy promotion. It would support economic development, while not increasing GHG emissions.

2.4. Implementation of relevant plans, programmes and specific measures

2.4.1. Requirements of conventions

The box below presents the provisions of Rio conventions concerning the implementation of action plans and specific measures. This broad category includes implementation of diverse measures that are foreseen in action plans of climate change, biodiversity and land degradation areas. It should be noted that there is a special Subsidiary Body for Implementation under UNFCCC which assists the Conference of the Parties with assessment and review of the effective implementation of the Convention.

UNFCCC Article 4.1.b. Formulate, *implement*, publish and regularly update national and, where appropriate regional programs containing measures to mitigate climate change ... and measures to facilitate adequate adaptation to climate change.

UNCCD Article 20.3. Affected developing country Parties ... undertake to mobilize adequate financial resources for the implementation of their national action programmes.

UNCBD obliges countries to implement, where necessary, specific measures described under various Articles, such as: Article 8.a. Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity;

Article 8.f. Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species.

2.4.2. National priorities

The ranking along the three different thematic areas of the issues relating to the conventions' requirement under consideration is as follows:

Issue	Ranking
UNFCCC - Development and implementation of national climate change strategies and action plans	No 4
UNCCD - Implementation of preventative measures for lands that are not yet degraded or which are slightly degraded	No 1
UNCCD - Implement national action program	No 4
UNCBD - Creation of protected area systems and their management	No 1
UNCBD - Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species	No 5

As can be seen, implementation of specific measures under climate change and biodiversity thematic areas was given the first priority.

2.4.3. Importance of the issue

Ignoring implementation of specific measures and action plans may have negative consequences on the state of environment, as well as on the livelihood of local population. Thus, non-enforcement of laws on the protection of forests (e.g. illegal logging) may result in the loss of habitats for flora and fauna, loss of sinks for GHGs affecting the climate, and in land degradation (soil erosion, landslides) – in turn influencing social and economic well-being of local people.

2.4.4. Analysis of the causes of failure to meet the requirement

As shown on Diagram 4, there are at least five immediate causes to why action plans and specific measures are poorly or not implemented in Georgia. These causes are as follows:

One of the reasons of poor implementation lies in the planning documents themselves. As it was mentioned under the relevant section above, most plans are vague, do not take financial and other resources into account, do not indicate responsible institutions, etc.

Another reason is the low financial and technical capacity of institutions to implement plans and programmes. Institutions lack financial resources to finance field-trips of employees or maintain and operate the equipment.

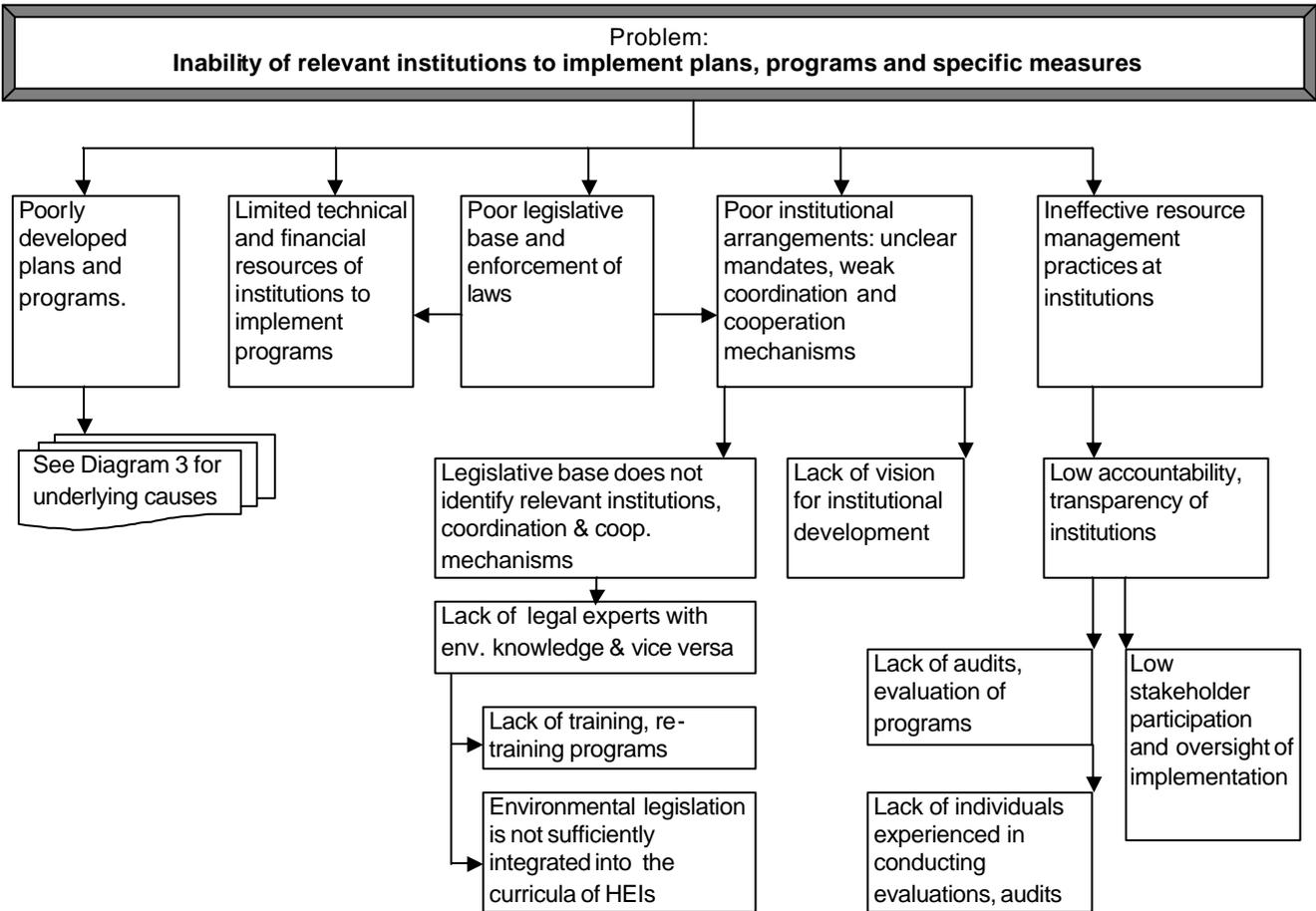
Major impediment in the implementation of specific measures lies in the poor legislative base and non-enforcement of existing laws. For example, Georgian legislation has provisions for providing economic incentives for biodiversity conservation and its sustainable use. However, tax rates on several components of

biological diversity are not defined and therefore not administered. Furthermore, Georgian legislation prohibits removal of those species of flora and fauna, which are included on the IUCN Red List of Threatened Species, for private or commercial purposes. However, illegal timber extraction, hunting and fishing is a widespread problem in Georgia. Only a small part of population applies to the state agencies for a license on use of fish and wildlife resources. Absence of clear rules over issuing licenses, as well as difficult tax rules, significantly promotes it.

The fourth immediate cause concerns the unclear mandates of relevant agencies in climate change, biodiversity conservation and land degradation areas. In addition there is weak coordination and cooperation among them, including sharing experiences and lessons learnt. This in turn is caused by the lack of vision of policy makers about institutional development and by the weak legislative base that does not identify coordination and cooperation mechanisms, as well as does not define clearly the functions of various institutions. Underlying cause for the latter capacity constraint is that the curricula of higher education institutions does not sufficiently cover environmental legislation, as well as there are limited training opportunities for the legal professionals to improve their knowledge about environmental legislation.

Ineffective resource management practices existing in most institutions is the last, but not the least cause for the poor implementation of action programs. There are two underlying causes for this capacity constraint. The first cause relates to the fact that audits and evaluations for state programs are rarely conducted – if at all, and the second cause relates to the low stakeholder participation in the oversight of implementation process.

Diagram 4. Problem Tree for the Priority Requirement
(Each arrow points to the causes of capacity constraints)



2.4.5. Needed capacities

Capacity needs at system level

- Mobilize and allocate adequate financial resources for implementation of action plans and programs.
- Develop capacities to carry out audits of institutional accountability with special focus on consistency with commitments under the Rio Conventions.

- Create coordination mechanism for implementing actions across all three areas in order to avoid duplication and ensure the effective use of scarce resources.
- Develop new laws and strengthen the existing ones with regard to the institutional accountability, division of responsibilities among various institutions, as well as concerning coordination mechanisms.
- Develop public awareness raising programs and the mechanisms for their involvement in the oversight of implementation process.

Capacity needs at institutional level

- Strengthen law enforcement agencies by clarifying their functions and providing necessary equipment.
- Improve mandates of all institutions working in climate change, biodiversity and land degradation areas.
- Improve human and financial resource management practices at institutions.
- Review salary structures and incentive systems within public institutions to encourage employees' motivation and positive performance.

Capacity needs at individual level

- Increase the skills of policy makers and analysts in developing proper institutional structure.
- Increase the skills of managers of institutions to elaborate job descriptions for employees and put in place and use performance evaluation system.
- Increase the skills of managers of public institutions, NGOs in the efficient use of resources.
- Increase the skills of individuals (evaluators) in undertaking institutional audits and evaluation of various programmes and plans, paying particular attention to the consistency with commitments under the Rio Conventions.

2.4.6. Opportunities for synergies

Synergies in the implementation of action plans in three thematic areas can be achieved by better coordinating those measures that cut across multiple areas. For example, addressing the issues of land degradation in the areas adjacent to the protected areas can serve two purposes – protection of biodiversity and soil conservation.

2.5. Technology transfer

2.3.1. Requirements of conventions

As can be seen from the box below all three conventions have requirements to promote technology transfer process and cooperate with other Parties in this regard. Furthermore, all three conventions established appropriate bodies for consultation on specific issues concerning the technologies and the transfer process. Thus UNCCD has a Subsidiary Body of the Conference of Parties – Committee on Science and Technology. UNFCCC operates the subsidiary body for Scientific and Technological Advice. UNCBD established a Subsidiary Body on Scientific, Technical and Technological Advice.

UNFCCC Article 4.1.c. Promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors.

UNCBD Article 16.1. ... Provide and/or facilitate access for and transfer to other Contracting Parties of technologies that are relevant to the conservation and sustainable use of biological diversity.

UNCCD Article 10.2.e facilitate access by local populations to appropriate information and technology.

Article 12 Affected country Parties, in collaboration with other Parties and the international community, should cooperate ...in the fields of technology transfer as well as scientific research and development.

Article 18.1.a. Fully utilize relevant existing national, subregional, regional and international information systems and clearing-houses for the dissemination of information on available technologies, their sources, their environmental risks and the broad terms under which they may be acquired;

Article 18.1.e. Take appropriate measures to create domestic market conditions and incentives, fiscal or otherwise, conducive to the development, transfer, acquisition and adaptation of suitable technology, knowledge, know-how and practices, including measures to ensure adequate and effective protection of intellectual property rights.

2.5.2. National priorities

The issue of technology transfer and technical cooperation in this regard is a high ranking issue under two thematic areas – climate change and land degradation.

Issue	Ranking
UNFCCC - Development and transfer of environmentally sound technologies	No 3
UNCCD - Promote technical and scientific cooperation and to develop and strengthen research capabilities	No 2

2.5.3. Importance of the issue

The issue of transfer, acquisition and adaptation of innovative technologies is important for at least two reasons:

- First, these technologies tend to be more environmentally sound – produce less greenhouse gases and other harmful substances, and cause less harm to environment than the technologies and practices currently in place.
- And second, these technologies are economically viable, produce goods and services in a more efficient way. This helps to eliminate wasting of both human and natural resources, which in turn reduces the costs of production in the longer term (after paying the costs of technology acquisition / replacement).

2.5.4. Analysis of the causes of failure to meet the requirement

Currently, Georgia does not have appropriate policy, legislative and institutional framework to facilitate the technology transfer process. Root cause analysis identified four immediate causes for this problem.

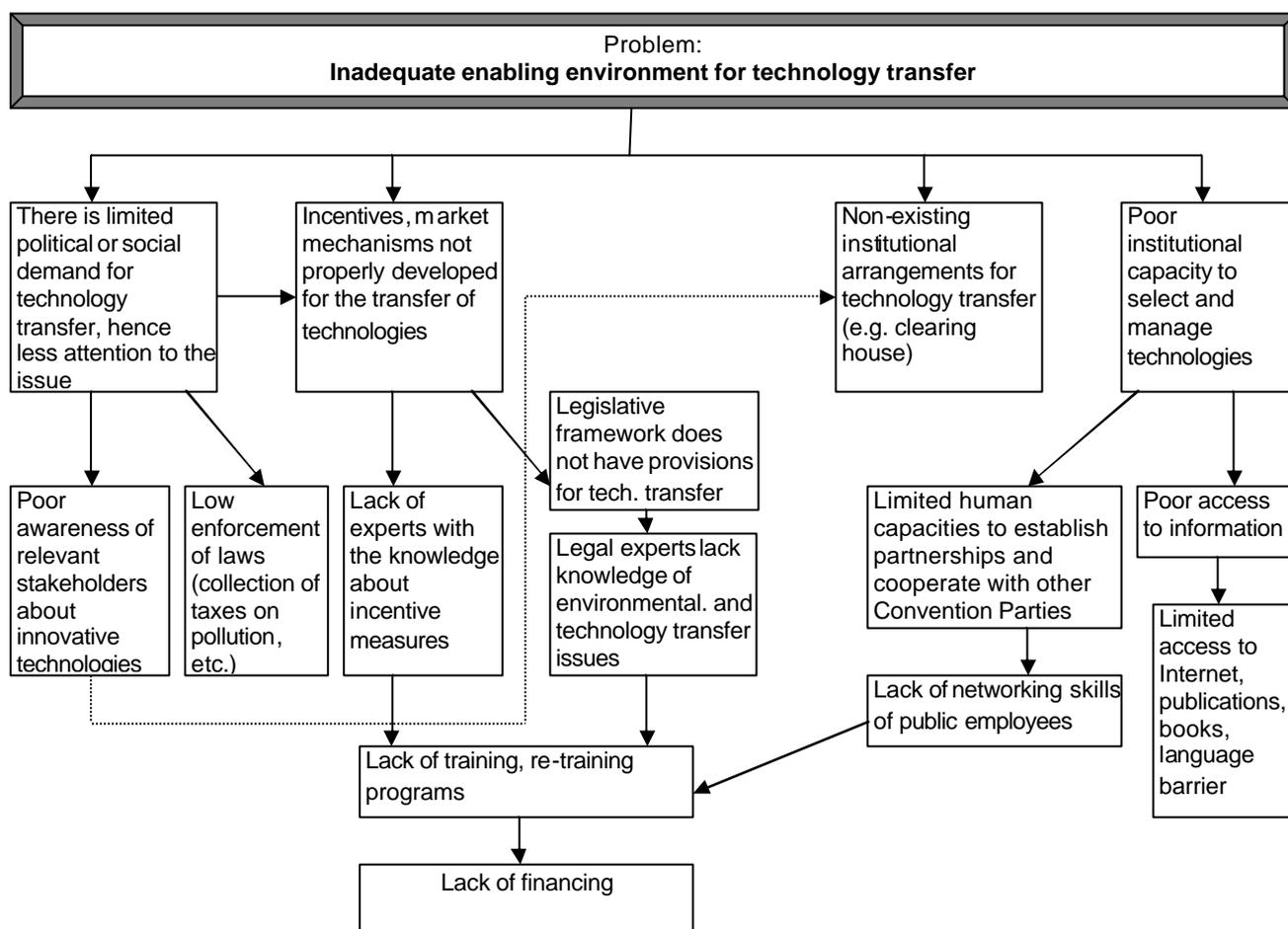
The first cause is connected with inadequate political and social demand for technology transfer, which in turn is caused by the low awareness of various stakeholders about innovative technologies and their benefits. This happens because information about the technologies is not disseminated among relevant stakeholders due to the non-existence of technology transfer mechanism, e.g. clearing house. The second underlying cause for low demand for the improved and environmentally sound technologies lies in low enforcement of laws (where it exists) concerning collection of taxes and fines on pollution. The third underlying cause is the absence of incentives which is discussed below.

The second immediate cause for inadequate enabling environment is connected with the lack of incentives and market mechanisms for adopting environmentally sound technologies. For example, taxes on CO₂ emissions are so low that they do not really function as incentives to reduce emissions. Shadow prices on fuel and electricity price subsidies discourage utilization of energy-efficient technologies or use of renewable energy sources. Underdeveloped incentives system can be attributed to the following factors: a) there is lack of experts knowledgeable about the mechanisms conducive to the development, transfer, acquisition and adaptation of suitable technology, knowledge, know-how and practices; b) there is a lack of legislative framework with the relevant provisions for technology transfer, including effective protection of intellectual property rights.

The third immediate cause relates to underdeveloped institutional framework. Currently there is no institution charged with responsibilities for making inventories of environmentally sound and innovative technologies and practices, including traditional technologies, and with the responsibilities for their dissemination and consultation about their application.

And finally, institutions have limited capacities to select and manage technologies. Two underlying causes for this capacity constrain include poor access to information (limited access to Internet, publications) and limited capacities of individuals to establish partnerships and effectively cooperate with other Convention Parties or with relevant subsidiary bodies.

Diagram 5. Problem Tree for the Priority Requirement
(Each arrow points to the causes of capacity constraints)



2.5.5. Needed capacities

Capacity needs at system level

- Develop incentives and market mechanisms for the transfer of technologies
- Create conducive legislative framework for technology transfer
- Establish institutional mechanisms, e.g. clearing house, for technology transfer
- Strengthen cooperation with relevant subsidiary bodies of the Conference of Parties

Capacity needs at institutional level

- Strengthen capacity of institutions to select and manage technologies
- Strengthen institutional capacity to the access to information

Capacity needs at individual level

- Increase the skills of policy legal professionals on environmental and technology transfer issues.
- Provide knowledge and know-how to experts about incentive measures for technology transfer.
- Increase networking and cooperation skills of public employees regarding technology cooperation; link them with individuals, international experts.
- Raise awareness of policy and decision makers, businessmen, local population about the benefits of various technologies and their application (to generate demand). Provide them with knowledge in novel concepts relevant to sustainable development and available technologies.

2.5.6. Opportunities for synergies

Synergy in the implementation of technology transfer can be achieved by charging one particular agency with the tasks of coordinating technology transfer process for all three thematic areas.

2.6. Strengthening research capacities

2.6.1. Requirements of conventions

All three conventions require promotion of technical and scientific cooperation and strengthening research capabilities for undertaking various types of researches. It should be noted also that all three conventions established special bodies for scientific, technical and technological advice that are required to provide advice on scientific programmes and international cooperation in research and development.

<p>UNCBD Article 12 – Establish and maintain programmes for scientific and technical education and training in measures for the identification, conservation and sustainable use of biological diversity and its components. Promote and encourage research which contributes to the conservation and sustainable use of biological diversity; Article 18.1. The Contracting Parties shall promote international technical and scientific cooperation ... through the appropriate international and national instruments.</p> <p>UNCCD Article 12 Affected country Parties, in collaboration with other Parties and the international community, should cooperate ...in the fields of technology transfer as well as scientific research and development. Article 17.1. Promote technical and scientific cooperation in the fields of combating desertification and mitigating the effects of drought.</p> <p>UNFCCC Article 4.1.g. Promote and cooperate in scientific, technological, technical, socio-economic & other research. Article 5.1.a. ... defining, conducting, assessing and financing research, data collection and systematic observation, taking into account the need to minimize duplication of effort. Article 5.1.b ... Strengthen systematic observation and national scientific and technical research capacities & capabilities.</p>

2.6.2. National priorities

Strengthening research capacities, scientific cooperation and research related activities was identified as a high priority across all three thematic areas. Specific high-ranking research activities include a) conducting environmental impact assessments with regards to the impacts of development activities on the conservation of biological diversity, and b) conducting assessments of vulnerability and adaptation to climate change.

Issue	Ranking
UNFCCC - Assessment of vulnerability and adaptation to climate change	No 2
UNCCD - Promote technical and scientific cooperation and develop and strengthen research capabilities	No 2
UNCBD - Utilizing EIAs for biodiversity conservation	No 3

2.6.3. Importance of the issue

The issue of strengthening research capacities is considered important because country is losing its scientific and technical potential which was highly developed during Soviet times. This may have negative impact on the quality of decisions that is taken in regards to development activities. For example, inadequately conducted EIAs, due to the lack of skilled experts, may result in unsustainable use of natural resources.

2.6.4. Analysis of the causes of failure to meet the requirement

After the break up of Soviet Union Georgia faces serious problems connected with the declining funding for conducting scientific researches; brain-drain of highly qualified scientists either abroad or to other sectors (due to minimal salaries in scientific and academic institutions); aging of scientific cadre because of difficulties of attracting young people to a low paid job, etc. All these together with other capacity constraints which will be discussed below weakens scientific capabilities of the country. In addition, there is limited cooperation with the scientific institutions abroad concerning researches on environmental issues.

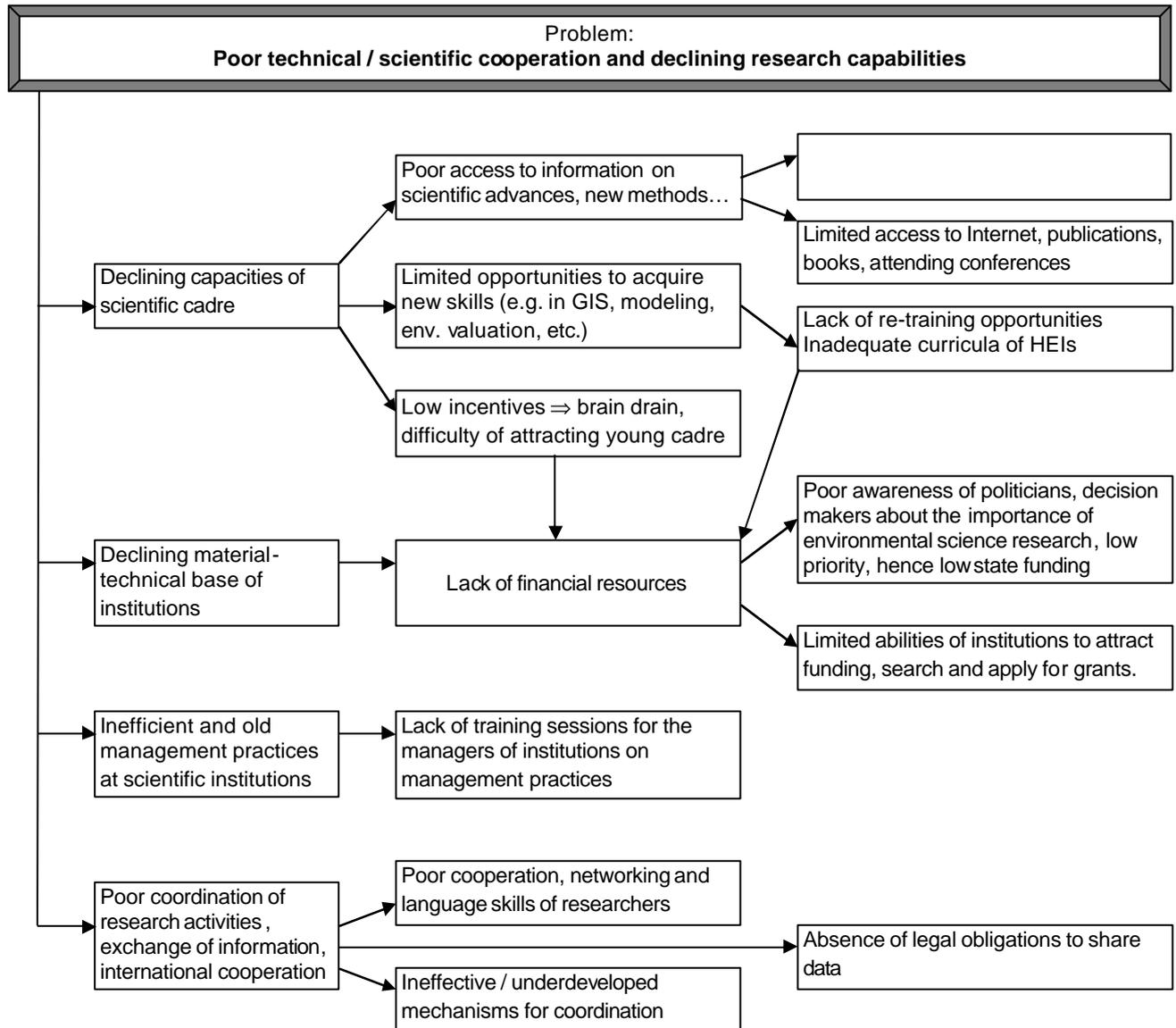
The immediate causes for the problem can be grouped into four categories as follows:

1. One of the foremost constraints is the *declining quality of scientific personnel* (especially at local level where there are very few scientific research institutions). There are three possible explanations to this phenomenon.
 - a) First of all, due to the lack of financial resources, researchers are paid low salaries that causes outflow of highly skilled cadre to NGOs, businesses or foreign countries. Linked to low incentives is the problem of attracting young people to science which causes aging and decline in the number of scientists.
 - b) Secondly, scientists have limited opportunities to acquire new skills as the curricula of higher education institutions do not sufficiently cover such disciplines as environmental economy, geo-

information systems and satellite technologies, environmental modeling and other modern research methods.

- c) Thirdly, scientists have limited access to information due to the following reasons: lack of Internet searching or language skills; limited access to books and publications; limited participation at conferences, seminars, workshops, etc.

Diagram 6. Problem Tree for the Priority Requirement
(Each arrow points to the causes of capacity constraints)



2. *Declining material-technical base of institutions:* most research and academic institutions have outdated and non-functioning equipment. At the same time institutions are not able to purchase new equipment (including computers and communication equipment) due to the limited financial resources. The latter capacity constrain, in turn, is caused by a) the inability of institutions to attract financing; and by b) the lack of understanding by politicians of the importance of conducting researches, thus resulting in low state financing of this sphere.
3. *Inefficient and old (Soviet) style of managing scientific institutions:* Managers of most research institutions are scientists with the Soviet experience of managing institutions; they fail to adapt to market conditions and lack the skills in public relations, financial, human and information resource management.

4. *Poor coordination, information sharing, and cooperation with international research institutions:* there are poor institutional linkages between research institutions and natural resource management agencies. The latter agencies in some cases do not even have information about the researches conducted in the field relevant to their activities. Research institutions decide by themselves what areas they want to conduct research on, without taking into account country's priorities or the application of research results. Underlying causes for this problem are the following:
- a) Ineffective functioning of various coordination mechanisms (e.g. Scientific-Advisory Councils established under Climate Change and desertification areas.)
 - b) Poor cooperation, networking and language skills; the shortage of latter skill limits the ability of researchers to cooperate with their peers abroad.
 - c) Absence of legal provisions obliging institutions to share information.

2.6.5. Needed capacities

Capacity needs at system level

- To create scientific-technical and management potential at a local level
- Strengthen cooperation with relevant subsidiary bodies of the Conference of Parties.
- Strengthen legislative base for coordination and information sharing of research activities.
- Create effective links between research and development institutions and those tasked with applying policies and practices relevant to three thematic areas.
- Strengthen links and collaboration with international research institutions (e.g. through exchange visitor programs, partner programmes with foreign institutions, probations abroad, conduct of joint research projects).
- Improve curricula of higher education institutions (incorporate such disciplines as GIS, remote sensing, modeling, economic valuation, etc.)

Capacity needs at institutional level

- Develop the capacity to better manage and deploy existing resources.
- Develop capacity of institutions to negotiate, obtain funds for research.
- Strengthen institutional capacity to access to information.
- Improve material-technical base of institutions in environmental science research field.
- Establish incentives for motivating people to take up research in the field.

Capacity needs at individual level

- Increase networking and cooperation skills of scientists.
- Increase managerial skills of individuals in charge of research institutions.
- Provide knowledge and know-how to scientists about modern technologies and disciplines (e.g. remote sensing, modeling, economic valuation, etc.)
- Raise awareness of policy and decision makers about the importance of environmental science research.

2.6.6. Opportunities for synergies

Because all three Rio conventions operate in shared systems, there are many opportunities for synergies in terms of conducting joint research projects in cross-cutting areas. These multidisciplinary research areas may include the following:

- Development and application of the computer models for the research and decision making processes
- Sustainable forest management
- Research relating to fire-interactions with topography, vegetation, water, climate, and people
- Sustainable energy systems: clean energy, energy savings, alternative energy carriers/transport/storage.
- Management and use of various waste streams
- Non-chemical pest, disease and weed management, etc.

– 3. Summary of Cross-Cutting Capacity Constraints

Capacity constraints at the systemic level

- Poor coordination and cooperation between various stakeholders
- Inadequate cooperation and networking with international community
- Underdeveloped legislative framework
- Poorly developed incentive systems and market instruments
- Weak law enforcement
- Low public awareness
- Weak integration of relevant environmental issues into the education system
- Inadequate financing of institutions
- Lack of up-to-date information about the state of the environment

Capacity constraints at the institutional level

- Unclear mandates of institutions
- Poor institutional management and performance
- Low accountability, transparency of institutions
- Low ability of institutions to mobilize financial resources
- Inadequate material-technical base of institutions
- Poor access to information: limited access to Internet, publications, books, language barrier
- Poor human resource management practices
 - Inadequate incentives system for employees
 - Non-existing performance management system of employees
 - Lack of opportunities for professional growth
 - Non-transparent hiring procedures
 - Poorly elaborated job descriptions, if at all
- Lack of avenues for sharing experiences – conferences, seminars (needed for coordination)
- Irregular / insufficient awareness raising programs / projects
- Non-existent regular training, re-training programs for state employees

Capacity constraints at the individual level

- Low networking and cooperation skills of public employees
- Lack of individuals experienced in conducting evaluations, audits
- Lack of experts with the knowledge about incentive measures
- Poor managerial skills of public employees
- Lack of strategic planning skills of the policy and decision makers (including skills to prioritize issues)
- Lack of skills of researchers in articulating research results
- Poor public relations and stakeholder involvement skills of government employees
- Poor team-work, networking skills of individuals
- Limited human capacities to establish partnerships and cooperate with other Convention Parties
- Lack of legal experts with the knowledge about environmental issues and vice versa
- Low knowledge and skills of scientists and experts working in env. field about
 - modern technologies
 - use of computer programs
 - disciplines such as
 - GIS
 - remote sensing
 - modeling
 - environmental valuation
 - cost-benefit analysis
 - assessing social impacts
 - evaluation of policies, projects and programmes

Appendix 1. Prioritization of Issues Results

UNFCCC

N	Convention Requirements/Issues	Average weighted score
1	Awareness and understanding of the climate change issues by decision makers	2.30
2	Assessment of vulnerability and adaptation	2.30
3	Development and transfer of environmentally sound technologies	2.21
4	Development and implementation of national climate change strategies and action plans	2.20
5	Development of abatement and adaptation programmes	2.20
6	Preparing national reports to UNFCCC	2.19
7	Abatement of greenhouse gas emissions and carbon sequestration	2.08
8	Development of legislative base	2.06
9	Integration of climate change considerations into the development of environmental, social and economic policies that is in development policies	2.04
10	Coordination with other conventions	2.01
11	Studies and observation, systemic monitoring, collecting meteorological, hydro metrological and climate data	2.01
12	Improvement of institutional arrangements, institutional organization, policy and decision making process	1.98
13	Clean development mechanism (CDM)	1.98
14	Convention negotiation capacity	1.88
15	Inventory of greenhouse gases, development and use of databases	1.86
16	Establishment of an intersectoral coordination body (e.g. governmental committee) on Climate change with its secretariat	1.57
17	Raising awareness of general public, education and training	1.42

UNCCD

N	Convention Requirements/Issues	Average weighted score
1	Establishing preventative measures for lands that are not yet degraded or which are slightly degraded	3.31
2	To promote technical and scientific cooperation and to develop and strengthen research capabilities	3.25
3	Awareness raising of the decision-makers concerning the land degradation / desertification issues	3.18
4	Implement national action program	3.11
5	Adoption of an integrated approach for addressing land degradation / desertification issues	3.03
6	Improvement of institutional set-up	2.98
7	Public awareness raising and their participation in decision-making	2.91
8	Consult and cooperate to prepare sub regional and/or regional action programs	2.90
9	Transfer, acquisition, adaptation and development of technology	2.84
10	Effective early warning and advance planning for periods of adverse climatic variation	2.81
11	Coordination of activities carried out under UNCCD and under other relevant intern. agreements, particularly UNFCCC & UNCBD	2.77
12	Systems to collect, analyze and exchange information	2.73

UNCBD

N	Convention Requirements/Issues	Average weighted score
1	Creation of protected area systems and their management	3.11
2	Development of biodiversity conservation action plans and programs	3.10
3	Utilizing EIAs for biodiversity conservation	3.04
4	Awareness raising of the decision-makers concerning the biodiversity	3.04
5	Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species	3.02
6	Developing and introducing economical and social incentives biodiversity conservation	2.97
7	Preserving indigenous and local knowledge, innovations and practices for biodiversity conservation	2.86
8	Identifying components and monitoring biodiversity	2.84
9	Public awareness raising about the importance of biodiversity and its conservation	2.84
10	Regulation the access to genetic resources and their use	2.79
11	<i>Ex-situ</i> conservation for <i>in-situ</i> conservation	2.76
12	Regulating the handling of living modified organisms	2.71
13	Facilitating exchange of information and scientific-technical cooperation with other parties of the convention	2.71
14	Creation of integrated databases concerning biodiversity	2.67

Appendix 2. Matrices for Priority Issues

Capacity Constraint Matrix for UNFCCC

N	Capacity Constraint	Particular obligations and convention requirements that these capacity issues relate to	Capacity constrains at system level	Capacity constraints at institutional level	Capacity constrains at individual level
1	Low awareness and understanding of climate change issues and requirements of UNFCCC by decision makers .	Awareness and understanding of the climate change issues by decision makers .	<ul style="list-style-type: none"> • Political and economic situation in the country is not favouring for providing more attention to global environmental issues. • Environmental issues are poorly integrated into the school and higher education institutions' curricula. • Awareness raising and training components of the climate change programme are not financed properly for the last 5 years. 	<ul style="list-style-type: none"> • Climate Change Agency established in 1996 under the Ministry of Environment to manage the National Climate Change Programme is understaffed and underfinanced from governmental budget. They are mostly financed through international projects. 	<ul style="list-style-type: none"> • Climate Change Agency lacks staff capable of undertaking effective public awareness raising campaigns. • There is a lack of skilled environmental journalists and public campaigners in NGOs. • Results of research findings on climate changes issues are poorly articulated to the decision makers.
2	Low capacities of research institutions in undertaking vulnerability and adaptation assessments.	Assessment of vulnerability and adaptation.	<ul style="list-style-type: none"> • There is no political or social demand for undertaking vulnerability and adaptation assessments . • There is no institution in the country charged with the mandate and tasks to undertake vulnerability and adaptation assessments. • Awareness of decision makers and general public about the importance of the issue is low; hence there is low demand for undertaking assessments. 	<ul style="list-style-type: none"> • Research institutions do not have experts capable of undertaking vulnerability and adaptation assessments . • Limited financial resources of institutions prevent them from undertaking vulnerability and adaptation assessments . • Employee re-training system is not in place in most institutions. 	<ul style="list-style-type: none"> • Lack of knowledge, skills and experience of researchers in vulnerability assessments – modeling, forecasting, economic analysis . • Lack of skills of researchers to communicate (articulate) research results to the decision-makers to generate demand.
3	Low capacity of government agencies to coordinate the development of abatement and adaptation programs.	Development of abatement and adaptation programs.	<ul style="list-style-type: none"> • Poorly functioning monitoring system undermines the ability of institutions to develop abatement and adaptation programs (lack of data, information). • Non-existent technology transfer mechanism hinders the inclusion of technological innovations in the abatement and adaptation projects and programs (see details under the relevant capacity constraint below). 	<ul style="list-style-type: none"> • Relevant institutions lack staff for developing abatement and action programs. • Institutions do not have know-how about the technological innovations for inclusion in the abatement and adaptation programs. 	<ul style="list-style-type: none"> • Lack of knowledge about the mitigation and adaptation technologies. • Lack of knowledge, skills and experience of decision makers, managers to plan for the development of abatement and adaptation programs.

N	Capacity Constraint	Particular obligations and convention requirements that these capacity issues relate to	Capacity constrains at system level	Capacity constraints at institutional level	Capacity constrains at individual level
4	<p>There is <i>low demand</i> for environmentally sound technologies.</p> <p>There is limited capacity in the country to <i>choose</i> technology, <i>adapt</i> to local conditions and <i>integrate</i> it with indigenous technologies.</p> <p>The <i>flow of know-how, experience and equipment</i> for mitigating and adapting to climate change amongst different stakeholders (such as governments, private sector, financial institutions, NGOs and research/education institutions) does not take place.</p>	<p>Development and transfer of environmentally sound technologies .</p>	<ul style="list-style-type: none"> Legislative-regulatory framework for enhancing technology transfer is not well developed. Georgian legislative framework does not address properly such issues as monitoring of GHG emissions, strengthening of energy efficiency and the use of renewable sources, regulation of exhaust gases from the transport sector, utilization of tax preferences. Moreover, many laws and by-laws contradict each other. Institutional framework for technology transfer does not exist. No institution or network of institutions is responsible for the technology transfer process. Technology intermediaries are not operating in Georgia. Incentive system does not promote the transfer of environmentally sound technologies . For example, taxes on CO₂ emissions are so low that they do not really function as incentives to reduce emissions. Shadow prices on fuel and electricity price subsidies discourage utilization of energy-efficient technologies or use of renewable energy sources . Financing mechanisms for adopting environmentally sound technologies are not available - unavailability of innovative mechanisms such as public/private sector partnerships and specialized credit facilities . Poor awareness of the decision-makers about the environmentally sound technologies affects their political will to create enabling environment for the technology transfer process. 	<ul style="list-style-type: none"> Research and technology development / innovation do not take place due to the limited human and financial resources . There are limited institutional and human capacities for selecting and managing technologies. (need for a clearinghouse) Institutions have limited capacities to develop human capacity (knowledge, techniques and management skills). Technical educational institutions have limited capacities to provide knowledge about technological innovations. Government, academic and research Institutions have limited access to information resources such as publications, Internet, participation at conferences, etc. Training for public and private stakeholders does not take place. Support for project preparation is done only for the projects financed from external sources . 	<ul style="list-style-type: none"> Poor language and Internet skills of researchers limit their ability to get new information from Internet, publications, participating at the conferences, etc. Poor networking skills of researchers make it difficult to exchange information about the environmentally sound and innovative technologies. Various stakeholders have Poor skills in developing project proposals for funding. Private sector stakeholders have poor skills in preparing business plans for getting loans . Poor public relations skills of government agency employees impede the involvement of stakeholders in the development of projects utilizing environmentally sound technologies .

N	Capacity Constraint	Particular obligations and convention requirements that these capacity issues relate to	Capacity constrains at system level	Capacity constraints at institutional level	Capacity constrains at individual level
5	<p>There is no National Climate Change Action Plan or Policy in the country;</p> <p>Climate Change issues are poorly integrated into sectoral policies.</p>	<p>Development and implementation of national climate change strategies and action plans , as well as their integration into sectoral policies .</p>	<ul style="list-style-type: none"> • There is little experience and tradition for developing effective strategies and action plans through participatory processes and consensus building. • Though there are some social economic development strategies and programs, including PRSP, which mention the need for developing renewable energies and increasing energy efficiency, these plans are poorly implemented. • Sectoral development plans either poorly or do not integrate climate change issues at all. Those that integrate are poorly implemented due to weak financing. • Climate change program envisages mainly undertaking of research activities in the climate change area, rather than developing and adopting climate change strategies and plans, development and implementation of specific measures . 	<ul style="list-style-type: none"> • Institutions that work on the development of strategies and action plans poorly communicate with each other. • Institutions working on sectoral development plans and programmes know little of the climate change issues. 	<ul style="list-style-type: none"> • There are very few people in governmental institutions that have knowledge, skills and experience in strategic planning, including planning of climate change issues.
6	<p>Reporting, coordination, writing</p>	<p>Preparing national reports to UNFCCC</p>	<ul style="list-style-type: none"> • Poorly functioning monitoring system does not inform the process of national reports preparation. • There are difficulties in achieving the continuous process of Inventarization. • Data collection system is not organized and existing data are not reliable. • National classificators do not follow IPCC guidelines (classificators) 	<ul style="list-style-type: none"> • Institutions responsible for collecting and analyzing data do not have sufficient financial and human resources. • Commission and working groups responsible for the implementation of climate change program turned out to be ineffective. • Lack of training programs for personnel on Cost-benefit Analysis (CBA), making projections, modeling. • Government representatives do not participate at the conferences of Parties to the Convention and various seminars due to the unavailability of financial resources . 	<ul style="list-style-type: none"> • Low motivation of commission and working group members to participate in the preparation of the reports . • Low knowledge of government employees in preparing project proposals. • Lack of skills in the development of adaptations measures, emission projections, CBA.

Capacity Constraint Matrix for UNCBD

N	Capacity Constraint	Particular obligations and convention requirements that these capacity issues relate to	Capacity constrains at system level	Capacity constraints at institutional level	Capacity constrains at individual level
1	There is a little capacity do design and manage properly new protected areas without external financial and technical support.	Establish a system of protected areas and promote environmentally sound and sustainable development in areas adjacent to protected areas .	<ul style="list-style-type: none"> • There is no national plan for developing protected areas. • Protected area systems are covering a reasonably representative sample of the major habitats and ecosystems but there are still some gaps and not all elements are of viable size. • Existing protected areas are severely under-funded by the central government. • The knowledge and incentives for using non-traditional mechanisms (including internal and external sources) of funding of protected areas are limited. • Georgia's protected areas were basically created during the Soviet period and their status and protection regimes do not correspond with the international categories of protected areas and their management regimes. 	<ul style="list-style-type: none"> • The Department of Protected area is responsible for designing and managing protected areas , however there are overlaps with the roles and responsibilities of other institutions such as MoE, Forestry Department, and Ecological Police. • Leadership of protected area institutions is weak and provides little guidance. • The Department has limited capacities to elaborate the methods and plans for management of protected areas. • Protected area institutions do not have up-to-date reliable information they need to develop and monitor strategies and action plans for the management of the protected area system. • The data of the Protected Areas Service on forest management and cadastre are incomplete and outdated. The data for past decade are not regular. No cadastre has been conducted since 1990. • The management body of protected areas are unable to establish partnerships with private sector and with agencies in other sectors, such as culture, tourism and transport, the cooperation with which is necessary to achieve success. • Department lacks experts in environmental policy and management, financial, human and information resource management, as well as specialists with the knowledge of foreign language. • There are not constant programs on training of experts in the field of protected areas management. Periodic short-term courses are held within the framework of donor programs only. • There is no measurement of performance or adaptive feedback. There are few opportunities for career development within the agencies ; no performance-based incentive system for advancement. • The Department's material-technical base is scarce and outdated – lack of facilities, equipment, operating funds at the headquarters and field level. The situation is comparatively better in the areas financed under the international programs. 	<ul style="list-style-type: none"> • Lack of strategic planning skills of the decision makers. • Lack of public relations skills. Lack of skills to establish partnerships.

N	Capacity Constraint	Particular obligations and convention requirements that these capacity issues relate to	Capacity constrains at system level	Capacity constraints at institutional level	Capacity constrains at individual level
2	<p>Weak capacity to elaborate feasible strategies, plans and programs.</p> <p>Coordination and cooperation traditions in the process of planning by various departments, scientific and non-governmental organizations is weak.</p>	<p>Development of biodiversity conservation action plans and programs.</p>	<ul style="list-style-type: none"> • Lack of vision, disagreement among the concerned parties over the long-term goals and priorities of development. • Lack of interaction and coordination among the governmental organizations and various stakeholders. • Lack of quality and up-to-date data to inform the decision-making process (deficiencies in data collection, sharing information and use of data). • Integration of the issues over conservation and sustainable use of biodiversity into the current strategies and plans is not satisfactory. • Ineffective participation of relevant stakeholders in the process of planning, especially of regional, local stakeholders. • Systemic planning of social-economic development and environmental protection, including biodiversity conservation, at local levels does not take place. Up to present not a single administrative territorial unit (region) or local government body has elaborated the environmental action plan. • Public awareness about biodiversity conservation issues is limited limiting their ability to effectively participate in the planning process. • State policy in the field of biodiversity conservation regarding private agricultural lands is not clearly defined. Ownership and management of agricultural lands is dispersed among various agencies both at central and local levels. • The Georgian legislation definitely regulates the issues of biodiversity conservation on the protected areas, however the issue of biodiversity conservation outside the protected areas is not addressed at a state level. There exists no state policy in this direction, while the management issues are dispersed among various legislative acts. 	<ul style="list-style-type: none"> • State organizations lack knowledge of such approaches and methods as the identification of risk factors to biodiversity, prioritization of those factors and identification of root causes of threats; • State organizations lack human resources capable to assess necessary human and financial resources to design feasible measures and time period for their implementation. • Various institutions do not have culture of sharing information, experiences and lessons learned (which is not documented in most cases). 	<ul style="list-style-type: none"> • Number of experts capable to conduct technical, financial and economic analysis of alternative measures on biodiversity conservation and sustainable use of its components is limited. • Policy makers lack strategic planning skills. • Experts lack skills in environmental valuation that prevents integration of biodiversity considerations into other sectoral plans. • Poor public relations and stakeholder involvement skills of the government representatives for ensuring effective participation of interested stakeholders in the planning process.

N	Capacity Constraint	Particular obligations and convention requirements that these capacity issues relate to	Capacity constrains at system level	Capacity constraints at institutional level	Capacity constrains at individual level
3	<p>Inadequate integration of biodiversity concerns in EIAs.</p>	<p>Utilizing EIAs for biodiversity conservation</p>	<ul style="list-style-type: none"> • Despite positive changes the public participation, possibility and capacity to contribute and influence the decision-making process is still limited. Public participation in the decision-making process is often influenced by the circumstance that the level of public awareness regarding this or that issue is too low, or the society is not acquainted with the established procedures of the decision-making process. • Need for improved EIA guidelines to minimize the impacts of developmental activities on biodiversity. 	<ul style="list-style-type: none"> • Development of consulting firms in the field of biodiversity is at the initial stage; accordingly number of skilled consultants is extremely limited. • Lack of EIA practitioners and appraisal officials in the country. • Institutions have limited human and technical capacities to conduct baseline studies and monitoring activities of development projects . 	<ul style="list-style-type: none"> • Number of experts to conduct environmental valuation of biodiversity impacts, propose mitigation measures is limited. • Lack of experience and skills of both public and private agencies for organizing public discussions and engaging concerned parties in the decision-making process.
4	<p>Low level of awareness of decision makers concerning the biodiversity conservation issues .</p> <p>The level of awareness among decision makers about the issues of international trade in endangered species of wild fauna and flora is extremely low in Georgia.</p> <p>Customs services of Georgia lack knowledge about the guidelines of the Convention and Georgia's commitments before CITES.</p>	<p>Awareness raising of the decision-makers concerning the biodiversity</p>	<ul style="list-style-type: none"> • Legislative documents are unfamiliar to the population and public officials due to the lack of funding for publishing and disseminating those documents . • Biodiversity conservation issues are not considered as a priority for the country's development by the decision-makers of various sectors; hence less interest in the issue. • Due to the non-payment of membership fees to many conventions, including the Convention on Biological Diversity, Georgian experts and focal points cannot participate in the conferences of Parties and negotiations, which deprives them of the opportunity to share experiences and get feedback. • Number of skilled journalists working in the field of environmental protection is limited • Non-governmental organizations are too weak to raise the awareness over the importance of biodiversity, while the state programs and projects are fragmental. • Environmental protection is weakly integrated in the courses of secondary schools and higher educational institutions. • Public officials do not feel accountable to the population concerning biodiversity conservation issues due to the low awareness of the 	<ul style="list-style-type: none"> • Most public institutions do not have terms of references for their employees, staff performance is not assessed, hence low motivation to acquire new knowledge and increase qualifications. • Communications among government institutions are complicated, especially between the central and regional offices . • Most state organizations do not possess computerized databases (uniform system of modern information technologies). The data, which exist in separate departments, are non-systemic and hardly available to other departments . • Very often state organizations have no funds to purchase magazines, books and other necessary periodicals ; • Internet services are not accessible to the employees; as a result they have no chance to get new information in their field. • The capacities for raising qualifications are limited at state and academic institutions. There are no organized systems for raising qualification. In the field of environmental protection knowledge is basically acquired from the projects funded from external sources; however, the 	<ul style="list-style-type: none"> • Financial incentives for the employees working for budgetary organizations are low. Hence, level of professionalism of pubic officials is low as well. • The employees of executive agencies, heads of various levels lack managerial competence, strategic vision and planning skills; • A great part of old staff failed to get rid of Soviet-old visions and approaches, while a significant part of the youth lacks professionalism, experience, discipline and sense of responsibility. • The competences of the convention focal points, who basically have only biological education, are not enough to effectively participate in the Conferences of Parties and negotiations. Good command of English or other international languages, which is necessary for it, is one of the serious problems as well. • Lack of skilled staff is one of the

		<p>population itself.</p> <ul style="list-style-type: none"> • There is lack of information about the state of environment due to the ineffective monitoring system and flow, exchange of information and experiences between various agencies. 	<p>educational courses organized through this assistance are short-term and non-periodic.</p>	<p>most severe problems at the regional offices of MoE.</p> <ul style="list-style-type: none"> • Individuals working in the non-governmental sector lack trainings in financial management, fundraising, organizational development issues, conservation methods and activities. 	
5	<p>Weak capacity to implement rehabilitation measures of degraded ecosystems and recovery of threatened species.</p>	<p>Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species.</p>	<ul style="list-style-type: none"> • The Georgian legislation regulates the issues of biodiversity conservation on the protected areas, however the issue of creation of the state management system for biodiversity conservation outside the protected areas is also important. There exists no public policy in this direction, while the management issues are dispersed among various legislative acts. • Legislation does not clearly marginalize the responsibilities of MoE, The Ministry of Agriculture and Food, Forestry Department, Protected Areas Department to carry out biodiversity conservation measures. For example, the functions and responsibilities of the Ministry of Agriculture and Food in the field of protection of plants against harmful substances, pesticide and chemical application management, supervision and control are not clearly marginalized from the functions of MoE. • There is lack of political will to address biodiversity issues because it is not considered as a priority among the decision-makers. • Funding of biodiversity projects by state organizations is equal to zero; at the same time, the capacities for preparation of project proposals and attraction of necessary funds by these institutions are too weak. • There is lack of up-to-date information about the degraded ecosystems and threatened species. • Population is not aware of the importance of implementing ecosystems rehabilitation measures, hence low demand for such types of projects. 	<ul style="list-style-type: none"> • Research institutions do not have sufficient financial resources to renew the red list which is needed to implement effective measures on conservation and preservation of endangered species. • Some studies take place at research institutions without taking into account the existing demand – inefficient old management methods from Soviet times is still present. Results of researches are not used later. • Department for Protected areas, Forestry Department, Ministry of Agriculture and other relevant state agencies lack human, technical and financial resources to meet their commitments. Nursery gardens and experimental plots necessary to concentrate species vulnerable to are not developed. Due to non-existence of regular monitoring, the Ministry of Agriculture and Food has no data over the current state of agrobiodiversity in the country. • Operating budgets of organizations do not envisage any expenses for business trips and field works and maintenance of the material-technical base. • NGOs implement important projects in the direction of biodiversity research, monitoring, conservation of endangered species vulnerable to extinction; however the scope of reach is limited due to the lack of financial resources (NGOs are mostly funded from external sources). 	<ul style="list-style-type: none"> • Low incentives due to low salaries and unsafe working conditions make employees non-interested in the restoration of ecosystems. • Employees of budgetary organizations lack information and knowledge about the modern methods of restoration of degraded ecosystems. This is partially caused by bad command of foreign languages and unavailability of foreign literature. • Population does not have knowledge about their rights to demand implementation of biodiversity rehabilitation projects.

6	<p>These policies have been significant in influencing corporate behavior in major resource sectors, including fisheries, forestry, agriculture and in the development of non-renewable resources.</p>	<p>Adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biodiversity.</p>	<ul style="list-style-type: none"> • Georgian legislation has provisions for providing economic incentives for biodiversity conservation and its sustainable use. However, there are some gaps in the legislation. Thus, a) due to poor knowledge of economic valuation methods tax rates on several components of biological diversity (e.g. non-timber resources, bear, etc.) are not defined and therefore not administered. b) regulatory system does not employ the full range of possible social and economic incentives; e.g. park entry fees, social incentives for livelihood support. • There is no law on defining the periodicity of fixed market price revision to ensure that prices on natural resources reflect the market processes, such as inflation, fluctuation of supply and demand, as well as natural processes and natural resource conditions, such as changes in natural populations. • According to the tax legislation, illegal hunting and fishing is fined. Moreover, the legislation envisages compensation for environmental damage. However, currently there are no methods of damage calculation; hence no fines are actually paid. • Weak law enforcement: Georgian legislation prohibits removal of those species of flora and fauna, which are included on the IUCN Red List of Threatened Species, for private or commercial purposes. However, illegal timber extraction, hunting and fishing is a widespread problem in Georgia. Only a small part of the population applies to the state agencies for a license on use of fish and wildlife resources. Absence of clear rules over issuing licenses, as well as difficult tax rules, significantly promotes it. • Higher education institutions do not give students necessary education and skills (no courses offered in environmental valuation and other subjects). • Lack of skilled human resources hampers designing and managing the incentive system for conservation and sustainable use of biological diversity. • A systemic approach towards this issue at a public policy level does not exist so far. Public policy in the field of biodiversity conservation regarding private agricultural lands is not clearly defined (incentives for farmers, land redemption or other mechanisms) 	<ul style="list-style-type: none"> • Institutions responsible for developing economic and social incentives and regulations (Ministry of Environment, Ministry of Economics, and various state departments) do not have skilled human resources able to identify the incentive needs and tax rates. • Limited financial resources of institutions do not allow the monitoring of the law enforcement process. 	<ul style="list-style-type: none"> • Employees have low skills in environmental valuation and insufficient knowledge of a full range of available incentives.
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Capacity Constraint Matrix for UNFCCD

N	Capacity Constraint	Particular obligations and convention requirements that these capacity issues relate to	Capacity constrains at system level	Capacity constraints at institutional level	Capacity constrains at individual level
1	Low capacity of budgetary organizations to undertake preventive measures .	Establishing preventative measures for lands that are not yet degraded or which are slightly degraded.	<ul style="list-style-type: none"> • Georgian legislation, e.g. Law on Soil Conservation and Fertility Improvement (2003), envisages implementation of preventive measures of land degradation. The mentioned law does not provide for the mechanisms of implementation, neither does it specify the functions of state agencies, control and supervision of activities, information exchange requirements. The law does not define the criteria for distribution of powers between the central and local bodies, as well as the competences of local bodies . These issues are not regulated by other relevant laws as well, such as the Law of Georgia on Melioration of Lands (1997), Law on the System of Protected Areas (1996), the Forest Code of Georgia (1999). A number of bylaws are still to be adopted and enforced. Overall, the main deficiencies of legislative documents include a great number of authorized bodies, non-distribution of powers among them, general character of the laws and lack of details and mechanisms for implementation of their provisions, as well as neglecting the coordination of activities among various agencies. • Although the issue of combating desertification and land degradation is more or less reflected in the general and sectoral strategies of social-economic development, in reality it <i>does not represent a priority</i> for the country. This is evidenced by a low level of funding from the state budget for land degradation programs / projects . • Lack of demand for undertaking preventive measures (farmers are unable to pay for the services, etc.) • There are no incentives for the private sector, banking sector to fund environmental measures. Alternative mechanisms of funding, such as local community funds, have not been developed yet. • There is lack of experts in the fields of financial management, environmental economy, geoinformation and remote sensing, environmental 	<ul style="list-style-type: none"> • Institutions do not command with the data necessary for undertaking preventive measures. The data which in most cases is not in electronic format is spread among various departments (the Ministry of the Environment, the Ministry of Agriculture, the State Department for Statistics, etc.) without being exchanged on a regular basis . • Financial capabilities of institutions are limited – institutions are not able to conduct fieldwork: pay per-diems, purchase supplies . • Relevant institutions have poor technical base for undertaking preventive measures – the equipment in most institutions are outdated and in poor condition. Most institutions lack computers, as well as the staff experienced in using computer programs. 	<ul style="list-style-type: none"> • Farmers lack knowledge on sustainable agricultural practices . • Employees of research institutions lack skills in financial management, environmental economy, geoinformation and remote sensing, environmental modeling • Low motivation of staff working for budgetary organizations to undertake preventive measures: low or no per-diems, salaries .

			<p>modeling, especially in the regions .</p> <ul style="list-style-type: none"> • There is lack of climatological, meteorological and hydrological data necessary for early warning of natural calamities (e.g. drought, flood). 		
2	Poor technical / scientific cooperation and research capabilities .	To promote technical and scientific cooperation and to develop and strengthen research capabilities .	<ul style="list-style-type: none"> • Mechanisms for international cooperation specifically for the promotion of technical and scientific capabilities in the land degradation area are weak. Focal point for the Convention (at the MoE) performs these tasks to a limited extent due to his overload with other tasks . • There are lack of avenues for getting and sharing information (attendance to conferences, seminars, access to Internet etc.). • Scientific potential of the country is underutilized due to the lack of funding of research projects. 	<ul style="list-style-type: none"> • There is limited access to information – new books, publications, Internet, sending employees to conferences. • There are no trainings provided on new technologies and approaches for sustainable land management. • There are no incentives for knowledgeable people to work for governmental and scientific institutions because of low salaries. • Professionals leave for better paid jobs (brain drain). • Scientific institutions have difficulties attracting youth and face the problem of aging of scientific cadre. • Most of the scientific institutions have poor technical base - outdated equipment, lack communication technologies, computers, as well as the staff experienced in using computer programs. • The financing that institutions get from the state budget (which for most of them is the only source of funding) is merely enough for paying salaries). 	<ul style="list-style-type: none"> • Lack of language skills to access new information / know how / participate at international conferences and seminars . • Poor knowledge of modern technologies available in land reclamation, conservation area.
3	Low awareness of decision-makers concerning land degradation / desertification issues.	Awareness raising of the decision-makers concerning the land degradation / desertification issues .	<ul style="list-style-type: none"> • Decision makers lack information on the state of land degradation / desertification issues , due to the problems existing in the system of data collection, analysis and dissemination. • State does not finance awareness raising programs / projects while internationally funded projects are of limited duration and scope. • Land degradation / desertification issues are not seen as a priority in the country's development; hence there is little interest by various sectoral officials on the issue. • There is low media and NGO involvement in the field of land degradation / desertification . • Environmental issues are poorly integrated into the school and higher education institutions' curricula. 	<ul style="list-style-type: none"> • Lack of training, re-training programs for the decision makers on land degradation issues and on environmental issues in general. • Poor flow and exchange of information among various stakeholders – low communication of the results of researches to the decision makers; low information sharing among governmental, research, academic institutions, NGOs, and private sector. 	<ul style="list-style-type: none"> • Low skills of researchers to communicate / articulate research results to the decision makers. • Low knowledge about land degradation issues among the decision makers.

4	<p>Inadequate human, technical and financial capacities to implement national action program.</p>	<p>Implement national action program .</p>	<ul style="list-style-type: none"> • National action program is a weak document which provides little guidance for solving land degradation issues. Thus, <ul style="list-style-type: none"> - National action program on combating desertification focuses on the desertification issues and does not aim at settling the land degradation problems throughout Georgia. Therefore, it is more for arid and semi-arid regions, and practically does not cover other areas. - The program gives priority to conducting researches, developing strategies/plans and implementing pre-feasibility activities, and does not suggest institutional arrangements for addressing land degradation issues . - The measures included in the program are general and basically stated at a conceptual level. The program did not identify specific project proposals, demonstration projects. Neither it includes the criteria and methods for assessment of measures and their prioritization, nor defines the possible sources of financing. - The program is very expensive and does not take into account available domestic financial resources . Hence, the program realization will significantly depend on international support. • Systematic exchange of information and data among relevant institutions is a serious problem due to absence of relevant legal obligations . 	<ul style="list-style-type: none"> • Cooperation among governmental institutions to implement the national action program is weak, however it is more systematic compared to the one among the academic institutions. • Limited financing of institutions does not allow them to fully implement measures envisaged in the national action program. 	<ul style="list-style-type: none"> • Low cooperation and networking skills of employees of budgetary organizations to share data, information and experiences for the projects under the national action program.
5	<p>Poor integration of land degradation issues into relevant sectoral policies and programs such as Indicative plans for social-economic development. Other policy and planning documents (e.g. The State Program on Land Protection and Soil Fertility Improvement, The State Program on Conservation and Development of Forests) are too ambitious and do not take the existing resources into account. Policy documents, plans are either too general or too ambitious and most of them do not define the sources of financing for scheduled</p>	<p>Adoption of an integrated approach for addressing land degradation / desertification issues .</p>	<ul style="list-style-type: none"> • Awareness of the decision makers about the problems and its consequences on economic and social development in Georgia - particularly at the appropriate policy making levels is low which impedes integration of land degradation issues into the development plans. • There is a lack of up-to-date and complete ecological, social, and economic information, including traditional knowledge, to guide integrated and cross-sectoral management planning . • Poor exchange of information about land degradation issues, low participation of public as well as low participation of regional authorities in the decision making process <i>hinders integration of all possible issues of land degradation into the development plans and programs</i>. Thus, local authorities of those areas which are threatened by desertification do not participate actively in the national planning processes to combat desertification (they are not represented in the 	<ul style="list-style-type: none"> • There is no institution with clear mandate to lead the processes of developing integrated approaches for addressing land degradation issues. • Government agencies and coordinating structures have limited capacities to engage relevant stakeholders in decision making process, and in the development of public/community/ private sector partnerships for integrated ecosystem management planning and implementation. • Government agencies have poor human resource management practices that results in poor quality staff – incapable of adopting integrated approaches to problem solving. The drawbacks in HR management include non-transparent recruitment of employees ; non-existence of incentives system for employees (low salaries, non-transparent 	<ul style="list-style-type: none"> • Low skills of team work of the representatives of various sectoral governmental departments. • Employees of budgetary organizations have low motivation to cooperate (low salaries and other incentives). • Lack of strategic planning skills - measures are planned without assessment of their feasibility and mobilization of appropriate funds .

	measures.		<p>Commission for example).</p> <ul style="list-style-type: none"> • There is limited human capacity to develop and implement integrated approaches to ecosystem management. • Experience in natural resources integrated planning/management is low and interested parties are governed by narrow departmental interests. • Planning is relatively short-term and measures are envisaged for 5-7 years. • Compared to a national level, planning is extremely weak at a local level. • Current plans and programs are general documents and do not include necessary political, legal, institutional & financial mechanisms of their implementation. 	<p>promotion mechanism); non-existence of staff performance management system .</p>	
6		Improvement of institutional set-up	<ul style="list-style-type: none"> • The current legislative framework related to management, protection and use of lands creates a very difficult institutional structure with many responsible agencies and obscure criteria for the distribution of powers among them, as well as among central and local agencies . It creates preconditions for overlapping of responsibilities. Moreover, legislative documents do not provide mechanisms for coordination of activities and exchange of information among various agencies. • Lack of long-term vision (goals and objectives) and feasible plans / action programs for addressing land degradation issues hinders the development of effective institutional framework necessary for the implementation of those programs. • There is no leading institution with clear mandate to lead processes related to sustainable land management in the country. • Weak institutional structure: <u>unclear mandates and duplication of responsibilities</u>. For example, the establishment of the State Commission for Land Use and Protection six years ago was justified by the non-existent institutional and legislative framework related to land protection. Today this Commission actually duplicates the functions assigned to Land Management Department under the MoE and other governmental bodies. There is duplication of responsibilities between the State Commission on Combating Desertification and Scientific-Consultative Council as well. Moreover, Roles and functions of the Ministry of Agriculture, MoE & Local Authorities with respect to sustainable land management are not clear or overlapped. 	<ul style="list-style-type: none"> • Coordinating body - State Commission on combating desertification fails to provide the participation of interested parties in the decision-making process. Moreover, State Commission is not properly composed of the representatives of local governments of those regions, which face the desertification/land degradation problems. • Systematic exchange of information and data among various institutions is a serious problem due to absence of relevant legal obligations . • Institutions working on land management issues are a) severely underfunded; b) have poor internal managementsystem. • The newly established Department of Land Management in the MoE is understaffed, does not have a) a clear mandate, ToR and b) highly skilled staff. • Inadequate human resources - no or little training on land degradation and strategic planning issues . 	<ul style="list-style-type: none"> • Low knowledge of policy makers in institutional development. • Low knowledge of approaches to address land degradation. • Low skills in strategic planning • Low skills in drafting laws and in consultation / cooperation with relevant stakeholders.

